

**BEFORE THE
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554**

In the Matter of

IP-Enabled Services

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WC Docket No. 04-36

**COMMENTS OF DIALPAD COMMUNICATIONS, INC.,
ICG COMMUNICATIONS, INC., QOVIA, INC., AND VOICEPULSE INC.**

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TABLE OF CONTENTS

I.	Introduction.....	1
II.	VoIP Stimulates Broadband Deployment.....	2
	A. Broadband Deployment is a Critical National Policy.....	2
	B. VoIP Drives Broadband Deployment.....	3
	C. A Patchwork of State Regulation Will Impede VoIP Development.....	4
	D. A Light Regulatory Touch Encourages Investment, Enhanced Features, Innovative Service Offerings, and Enhanced Competition.....	5
III.	VoIP Services Should be Classified as an Interstate Information Service	8
	A. VoIP and Other IP-Enabled Services are Inherently Interstate in Nature	8
	B. The Joint Commenting Parties’ VoIP Services are “Information Services”	9
	C. Most VoIP and Other IP-Enabled Services are Information Services, Functionally Equivalent to Pulver.com’s Free World Dialup Service.....	14
	D. The Joint Commenting Parties’ VoIP Services are Fundamentally Dissimilar to AT&T’s Phone-to-Phone “VoIP Service”	16
IV.	Commission Regulation Should be Narrowly Aimed at the Physical, Facility Layer.....	17
V.	VoIP is a Nascent Service and Should Not be Subject to Traditional Common Carrier Regulation.....	18
VI.	The VoIP Industry Should be Given the Opportunity to Address Social Goals.....	20
	A. Access to Emergency Services	20
	B. Contributions to the Universal Service Fund.....	21
	C. Access Charges	22
VII.	Conclusion	23

Executive Summary

Dialpad Communications, Inc., ICG Communications, Inc., Qovia, Inc. and VoicePulse, Inc., (herein referred to as the “Joint Commenting Parties”), by their undersigned counsel, hereby submit the following comments in response to the Notice of Proposed Rulemaking (“NPRM”) adopted by the Federal Communications Commission (“FCC” or “Commission”) in the above-referenced docket on February 12, 2004. As providers of voice over Internet Protocol (“VoIP”) services, the Joint Commenting Parties submit these comments to aid the Commission in determining the appropriate regulatory framework for VoIP and other IP-enabled services.

To summarize the comments submitted below, the Joint Commenting Parties believe that VoIP has a symbiotic, mutually beneficial relationship with broadband Internet access, and as such, the Commission should take steps to allow VoIP to grow and develop to the greatest possible extent to maximize its benefits to broadband deployment. VoIP should remain free of unnecessary regulation which will only add unnecessary, potentially prohibitive costs and burdens on VoIP service, which in turn will increase costs to consumers and reduce the market demand for both VoIP and broadband services. Moreover, Commission inaction on VoIP jurisdictional questions could significantly diminish the potential benefits of VoIP and broadband availability by allowing states to create a patchwork of different regulations which could be significantly detrimental to the development of VoIP services.

VoIP and other IP-enabled services, by their nature, travel over an interstate (and in some cases multi-national) IP network. Numerous commenters in three separate VoIP-related proceedings have stated that VoIP is an inherently interstate service, and as such, should be regulated solely by the FCC. These commenters are correct. Because VoIP calls travel over privately managed networks or the Internet backbone (in fact, this is an essential element to the

appeal of and increased functionality of VoIP), it is nearly impossible to determine the physical location of the origination and termination points of a VoIP call. As such, it is essentially impossible to determine that a VoIP call originated, was routed, and terminated in a single state. The FCC should establish its exclusive jurisdiction over this service.

The Joint Commenting Parties believe that the Commission should use a “light” regulatory touch over VoIP. VoIP is currently spurring capital investment, encouraging development of enhanced features, stimulating the creation of new technologies and services, and prompting service providers to create innovative service offerings. All of this activity directly benefits the American consumer, and is creating greater competition and lowering of prices domestically and abroad. The Joint Commenting Parties’ VoIP services meet the definition of “information service” as set forth in the 1996 Communications Act, and should be afforded regulatory treatment as such.

Finally, the Joint Commenting Parties believe that the VoIP Industry should be afforded the opportunity to address the public policy goals discussed in the IP-Enabled Services Notice of Proposed Rulemaking such as access to emergency services, contributions to the Universal Service Fund, and issues concerning access charges. Although the VoIP industry is still in its infancy, it is beginning to address these issues through forums and workshops, and is doing so with much faster progress than was shown by the cellular industry. The Commission should allow this work to continue, and only regulate VoIP in those areas where a clear breakdown in the competitive marketplace can be definitively determined.

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I. Introduction

Dialpad Communications, Inc., ICG Communications, Inc., Qovia, Inc. and VoicePulse, Inc., (herein referred to as the “Joint Commenting Parties”)¹, by their undersigned counsel, hereby submit the following comments in response to the Notice of Proposed Rulemaking (“NPRM”) adopted by the Federal Communications Commission (“FCC” or “Commission”) in

1 Qovia, Inc. (“Qovia”) develops software that monitors and manages voice quality on VoIP systems. Qovia’s voice quality monitoring and management products are already running on more than 100 networks. Customers include Fortune 1000 businesses, school districts, government agencies, law enforcement agencies, banking and finance companies, call centers, voice carriers and others.

ICG Communications, Inc. (“ICG”) is a communications and information service provider. ICG’s IP-based service offerings include broadband, dial-up Internet access, dedicated Internet access, VoIP and other IP services. ICG’s VoIP service is called VoicePipe™ and is offered to business consumers in all sixteen of ICG’s core states. In addition to its information services offering, ICG also provides facilities-based local exchange and interexchange services to business customers in California, Colorado, the District of Columbia, Illinois, Maryland, Massachusetts, New Jersey, New York, Ohio, Texas, Virginia, and Washington.

VoicePulse, Inc. (“VoicePulse”) is a New Jersey based communications company that uses its VoIP network to deliver advanced features and high-quality voice service to residential and small-business consumers. The company is an industry leader in innovative features and excellent customer service, and serves customers around the world.

Dialpad Communications, Inc. (“Dialpad”) is a leading provider of high-quality Internet calling solutions, providing service to and from users in over 200 countries. Dialpad’s patent-pending technology allows a user to use their dial-up or broadband internet connection to call virtually any phone number in the world. Dialpad focuses on international long distance and serves mostly users located outside of the United States. The company is based in Milpitas, California.

the above-referenced docket on February 12, 2004. As providers of voice over Internet Protocol (“VoIP”) services, the Joint Commenting Parties submit these comments to assist the Commission in determining the appropriate regulatory framework for VoIP and other IP-enabled services.

The following comments focus on VoIP services, but are applicable to IP-enabled services generally. As an initial matter, the Joint Commenting Parties refer to “VoIP services” herein as those services commonly referred to in the VoIP industry as computer-to-computer, computer-to-phone, or phone-to-computer IP communications.²

II. VoIP Stimulates Broadband Deployment

A. *Broadband Deployment is a Critical National Policy*

The FCC, the White House, and many congressional leaders have identified broadband deployment as an important strategic national goal. The deployment of broadband is a critical element to America’s continued economic prosperity and its continued deployment is a key element of preserving America’s position in the world as leader of technological innovation. While broadband deployment has grown in the United States over the past several years, the rate of that penetration has slowed, and the United States has fallen behind other countries in its rate of broadband deployment.

The Commission has recognized that when fully deployed in the United States, broadband will dramatically reduce the time and cost to acquire information, and eliminate geographic distance as an obstacle to acquiring such information.³ When fully deployed and

² See *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Report to Congress, FCC 98-67 at ¶¶ 87-90 (rel. April 10, 1998) (“*Report to Congress*”).

³ See generally Federal Communications Commission website on broadband policy at: <http://www.fcc.gov/broadband/>.

universally available, broadband technology will increase America's productivity and enhance communication services in education and health care settings. Broadband allows users to remotely access life-enhancing services such as telemedicine, remote education, and enhanced Internet video and voice communications services. In a March 2, 2004 speech, President Bush declared that "[t]his country needs a national goal for broadband technology, for the spread of broadband technology" and that "[w]e ought to have a universal, affordable access for broadband technology by the year 2007, and then we ought to make sure as soon as possible thereafter, consumers have got plenty of choices when it comes to purchasing [broadband services]."⁴

B. *VoIP Drives Broadband Deployment*

VoIP has a symbiotic, mutually beneficial relationship with broadband. VoIP customers must have broadband access to use VoIP service.⁵ The development and deployment of VoIP is directly benefited by the increased availability of broadband services. VoIP also drives broadband deployment. VoIP's competitive services bring new customers to the broadband market. The availability of VoIP is also driving consumer demand for broadband services in areas of the country where broadband is not currently offered.

The Commission should take steps to allow VoIP to grow and develop to the greatest possible extent, so as to maximize the demand for broadband applications. VoIP should remain free of unnecessary regulation which will only add unnecessary costs and burdens on VoIP services, which in turn will reduce the market demand for both VoIP and broadband applications.

4 President George W. Bush, Address at the Expo New Mexico in Albuquerque (Mar. 26, 2004).

5 As noted *supra*, AT&T's phone-to-phone "VoIP" service do not require broadband connections, which is one of the reasons why AT&T's service is rightly considered a "telecommunications service" as opposed to an "information service."

C. *A Patchwork of State Regulation Will Impede VoIP Development*

Commission inaction on VoIP jurisdictional questions could significantly diminish the potential benefits of VoIP and broadband availability. In Section IV of the NPRM, the Commission requests comments concerning the jurisdictional nature of IP-enabled services. This question may be one of the most important the Commission addresses during this investigation. As a matter of public policy, state-by-state regulation of VoIP and other IP-enabled services would pose significant regulatory burdens on this emerging competitive industry. To date, more than two-dozen states have investigated, attempted to regulate, decided not to regulate, or have otherwise addressed VoIP in one form or another. For example, the Minnesota Public Utilities Commission has attempted to regulate VoIP services, and has litigated for its right to do so.⁶ The California Public Utilities Commission has opened an investigation into VoIP services under the assumption that VoIP services may be regulated by that agency as telephone utility services.⁷ The New York Public Service Commission has also raced to assert jurisdiction over VoIP services in a recent ruling concerning the service provisioned by Vonage Holdings Corp.⁸ The staff of the Missouri Public Service Commission has released a report that

⁶ See generally *Vonage v. Minnesota PUC*, 290 F. Supp. 2d 993 (D.Minn. 2003).

⁷ See *Order Instituting Investigation on the Commission's Own Motion to Determine the Extent to Which the Public Utility Telephone Service Known as Voice over Internet Protocol Should be Exempted from Regulatory Requirements*, Investigation No. 04-02-007 (CA PUC Feb. 11, 2004).

⁸ See *Complaint of Frontier Telephone of Rochester, Inc. Against Vonage Holdings Corp. Concerning Provision of Local Exchange and Interexchange Telephone Service in New York State in Violation of the Public Service Law*, Order Establishing Balanced Regulatory Framework for Vonage Holdings Corporation, Docket No. 03-C-1285 (NY P.S.C. May 21, 2004).

recommends subjecting VoIP services to common carrier regulation in the State.⁹ On the other hand, states such as Pennsylvania and Florida have decided to largely forgo regulation of VoIP at this time. Such differentiated state regulation will significantly increase and widen in scope if the Commission fails to assert its rightful exclusive federal jurisdiction over VoIP and other IP-enabled services.

A patchwork of state regulations would be incredibly detrimental to the development of VoIP services. The potential myriad of state regulation would likely cause significant hardship to those emerging VoIP service providers. These small businesses should not be forced to expend much-needed time and resources to fulfill 50 different state obligations. Moreover, the ability for VoIP services to be transported across state jurisdictions would make it prohibitively expensive and difficult for VoIP service providers to determine exactly which states' regulations would be applicable to their services.

D. *A Light Regulatory Touch Encourages Investment, Enhanced Features, Innovative Service Offerings, and Enhanced Competition*

Allowing VoIP to develop in a “light” regulatory environment produces dramatic results in investment, enhancement of features, innovation of service offerings, and increased competition. Although VoIP is still in the early stages of development, it could eventually become a driving economic force by creating jobs, spurring the development of future technologies, increasing investment, and reducing consumer costs of all types of voice service. Although these benefits are already becoming reality, the FCC can assure that these rewards continue to increase in future years by ensuring that the VoIP industry is subject to a “light” regulatory environment.

⁹ See Public Service Commission of the State of Missouri, *A Study of Voice Over Internet Protocol in Missouri, VoIP Industry Task Force Report*, Case No. TW-2004-0324 (Mar. 30, 2004).

VoIP is currently spurring capital investment back into the telecommunications market. For example, on April 19, 2004, Qovia announced that it had closed \$10.6 million in second round equity financing. Such investment, which followed an initial round of \$5.5 million in financing for the company in October 2003, is beginning to drive the VoIP market, create new jobs, lower costs, and accelerate innovative VoIP service offerings.¹⁰ Such investment to date, however, has been limited because of regulatory uncertainty. Investors are slowly coming to VoIP, but large-scale venture capital investment will evade many VoIP providers until the FCC creates a stable regulatory environment for the service.

VoIP providers are also creating and offering enhanced features. For example, ICG recently began to offer enhanced business services called “Voice + Web Conferencing.”¹¹ This service provides business conferencing customers integrated voice and Internet functionality over the company’s VoicePipe™ VoIP service. Through VoIP, ICG has been able to deepen its service offerings far beyond what traditional analog telephony can provide. As such, VoIP has allowed companies to further diversify their service offerings, while remaining robust in the telecommunications industry.

Additionally, over the past year, VoicePulse has rolled out several enhanced services such as “Multi-Ring,” “Do Not Disturb Prompt,” “Anonymous Call Prompt,” and “Call Filters.” “Multi-Ring” allows simultaneous or sequential ringing of a customer’s VoIP phone and traditional land line or cellular phone. The “Do Not Disturb Prompt” prompts callers with a verbal message that notifies them that the caller is busy, but also gives an option to break through

¹⁰ See Press Release, Qovia, Inc., Qovia, Inc. Announces \$10.6 Million Second Round Venture Investment (April 19, 2004) available at: http://www.qovia.com/company/news/04.16.2004_Funding_roundB_final.htm.

¹¹ See Press Release, ICG Communications, Inc., ICG Launches Integrated Voice+Web Conferencing - Bundles With ICG's IP PBX Solution VoicePipe™ (Feb. 10, 2004) available at: <http://www.icgcomm.com>.

and ring the phone anyway. “Anonymous Call Prompt” gives anonymous callers (with caller-id blocking) a prompt to enter their telephone number manually, which is then displayed on the VoicePulse customer’s Caller ID display. “Call Filters” allow customers to choose how phone calls are handled based on the phone number of the caller. Instead of screening callers with an answering machine, VoicePulse customers can configure exactly which calls get a busy signal and which ones ring. All of these enhanced services come free in all VoicePulse calling plans.¹²

VoIP is also leading to the creation of new technologies and services. For example, numerous voice-service providers and equipment manufacturers including Microsoft, Qualcomm, and Cisco are finalizing development of wireless fidelity (“Wi-Fi”) telephones. These Wi-Fi phones will allow customer to remotely access broadband connections to utilize VoIP services. It is expected that such phones will allow customers to replace a cordless phone or a wired private branch exchange (“PBX”) with a wireless LAN. VoIP platforms are also leading to the development of innovative equipment-driven service offerings.

VoIP is also enhancing competition domestically and abroad. For example, on February 10, 2004, Dialpad Communications announced that it lowered its rates for Internet telephony calls to and from Canada by more than half. Previously set at 3.9 cents per minute, calls to Canada from over 200 countries are now priced as low as 1.7 cents per minute. The company also lowered international call rates through its “DialpadPrepaid” service from Canada to routes around the world, with over 30% price reductions for calls to London, Sydney, and the United

¹² See Press Release, VoicePulse Inc., VoicePulse Unveils Enhanced Calling Features (May 27, 2003) available at: <http://www.voicepulse.com>. See also Press Release, VoicePulse Inc., VoicePulse Gives Consumers New Ways to 'Screen' Phone Calls VoicePulse Unveils Enhanced Calling Features (Jun. 19, 2003) available at: <http://www.voicepulse.com>.

States.¹³ As VoIP grows, such competition will continue to drive down VoIP service prices as well as the prices of traditional telephony service providers. In order to foster increased competition in the United States telecommunications marketplace, the Commission should ensure that competitive VoIP services are not hindered by unnecessary common carrier regulations.

III. VoIP Services Should be Classified as an Interstate Information Service

A. *VoIP and Other IP-Enabled Services are Inherently Interstate in Nature*

Setting aside the Commission's determination as to a specific phone-to-phone VoIP service, computer-to-computer, computer-to-phone, and *vice versa* VoIP services should be classified as interstate information services. These variations of VoIP and other IP-enabled services, by their nature, travel over an interstate (and in some cases multi-national) IP network. Numerous commenters in three separate VoIP-related proceedings have stated that VoIP is an inherently interstate service, and as such, should be regulated solely by the FCC.¹⁴ These commenters are correct. By traveling over private networks or the Internet backbone, it is nearly impossible to determine the physical location of the origination and termination points of a VoIP call. As such, it is impossible to determine that a VoIP call originated, was routed, and terminated in a single state.

The deployment of broadband access is also allowing VoIP users to relocate to other Internet ports anywhere in the country to utilize VoIP service. Although it is possible for some VoIP calls to be made entirely within a single state, it is nearly impossible to make that

¹³ See Press Release, Dialpad, Inc., Dialpad Lowers Internet Telephony Rates To and From Canada (Feb. 10, 2004) available at: http://www.dialpad.com/company/press_2004_0210.html.

¹⁴ See generally Vonage Holdings Corp., *Notice of Ex Parte Meeting in WC 03-211 and WC 04-36*, Docket No. WC 04-36 (FCC Apr. 30, 2004).

determination on a call-by-call basis, and as such, the Commission should utilize the “mixed use doctrine” to determine that VoIP and other IP-enabled services are inherently interstate services, and therefore are within the sole jurisdiction of the FCC.¹⁵

B. *The Joint Commenting Parties’ VoIP Services are “Information Services”*

The Joint Commenting Parties’ VoIP services meet the definition of “information service” as set forth in the 1996 Communications Act (“the 1996 Act”).¹⁶ Under the 1996 Act, the definitions of “telecommunications” and “telecommunications service” are distinct from the definition of an “information service,” which is defined by the 1996 Act as “the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.”¹⁷

The Commission has determined that these definitions are mutually exclusive, and that that they are analogous to the definitions of “basic service” and “enhanced service” developed in the Commission’s *Computer II* proceeding.¹⁸ In enacting the 1996 Act with these particular definitions, Congress intended to maintain a regulatory system in which information service

¹⁵ As noted in the NPRM, the “mixed use” doctrine is appropriate in instances where it is impossible or impractical to separate interstate from intrastate traffic carried over a shared facility. *See NPRM* at n.130.

¹⁶ The 1996 Act defines “telecommunications service” as “the offering of telecommunications for a fee directly to the public or to such classes of users as to be effectively available directly to the public regardless of the facilities used.” 47 U.S.C. § 153(46). The term “telecommunications” is defined as “transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.” 47 U.S.C. § 153(43).

¹⁷ 47 U.S.C. § 153(20).

¹⁸ *Amendment of Section 64.702 of the Commission’s Rules and Regulations (Second Computer Inquiry)*, Docket No. 20828, Final Decision, 77 FCC 2d 384 (1980) (“Computer II”), subsequent history omitted.

providers are not subject to regulation as common carriers merely because they provide their service “via telecommunications.” The Joint Commenting Parties’ provision of VoIP services satisfies the FCC’s definition of an enhanced service.

In the *Second Computer Inquiry*, the FCC defined unregulated “enhanced services” as

services, offered over common carrier transmission facilities used in interstate communications, which [1] employ computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s transmitted information; [2] provide the subscriber additional, different or restructured information; or [3] involve subscriber interaction with stored information.¹⁹

The Joint Commenting Parties’ service changes the form of the information as sent and received by the users of the service, by converting IP packets generated by the Joint Commenting Parties’ respective adapters into the synchronous TDMA format used by the public switched telephone network (or vice versa). As such, the Joint Commenting Parties’ provision of VoIP service “employ[s] computer processing applications that act on the format, content, code, protocol or similar aspects of the subscriber’s transmitted information.”²⁰ Moreover, the Joint Commenting Parties VoIP services also “provide the subscriber additional, different or restructured information.”²¹

While the functionality that VoIP service provides is similar to that provided by traditional telephone companies, the manner in which the Joint Commenting Parties provide their VoIP service is significantly different. In *Computer II*, the FCC recognized that enhanced services may be similar in nature to communications. “We acknowledge, of course, the existence of a communications component. And we recognize that some enhanced services may do some

¹⁹ 47 C.F.R. § 64.702(a).

²⁰ 47 C.F.R. § 64.702(a).

²¹ *Id.*

of the same things that regulated communications services did in the past. On the other side, however, is the substantial data processing component in all these services.”²² The Commission stated that the technological differences between these services justified separate regulatory treatment.

Most VoIP applications, including those offered by the Joint Commenting Parties, processes voice communications into digital data. This data is routed over data networks, utilizing the customer’s broadband Internet connection. This allows subscribers to place and receive voice communications without a telephone line. The ruling in *Computer II* makes clear that it is essential to examine the actual functionality of the service to determine the appropriate level of regulation. As such, the Joint Commenting Parties request that the Commission recognize the functional difference between the VoIP services provided by the Joint Commenting Parties from the traditional, circuit-switched telephone network voice communication. These communications are not originated and terminated in a manner similar to traditional voice telephony. Although VoIP service generally does not modify the “content” of its transmissions, it does fundamentally convert these transmissions to provide an interface between otherwise incompatible network protocols.

The Commission has specifically dictated that a protocol conversion is considered to be an enhanced service so long as that conversion is a “net protocol conversion.”²³ This net

²² *Computer II* at 435.

²³ *Communications Protocols under Section 64.702 of the Commission’s Rules and Regulations*, Memorandum Opinion, Order, and Statement of Principles, 95 FCC 2d 584, 596 (1983) (“*Communications Protocols Decision*”). The FCC later summarized this conclusion to stand for the principle that the protocol conversion standard of 64.702(a) does not reach network processing in carrier’s networks (setup, takedown and routing of calls or their sub-elements). *Waiver of Section 64.702 of the Commission’s Rules*, Memorandum Opinion and Order, 100 FCC 2d 1057, 1071 (1985).

protocol conversion test examines the service on an end-to-end basis from the demarcation point at the premises of the originating caller to the demarcation point where the call will be terminated.²⁴ The Joint Commenting Parties' VoIP service satisfies this FCC's net protocol conversion test as the services provided by the Joint Commenting Parties require the installation of equipment that convert analog voice signals into digital IP data packets that travel over the Internet or privately managed networks in an asynchronous mode. These devices also allow subscribers to convert digital IP packets that travel over the Internet or privately managed networks into a usable analog voice signal when calls are received. As such, VoIP service is properly classified as an information service under the 1996 Telecommunications Act, and these services should not be subject to common carrier regulation. Unlike traditional telephony, VoIP information service is completely dependent upon the customer's broadband Internet connection.

Moreover, the Commission addressed the classification and regulation of various Internet services in its 1998 Report to Congress on Universal Service. In that report, the FCC generally found that Internet access services provided by ISPs should not be classified as "telecommunications services" under the 1996 Act. In the report, the Commission also considered what it termed "computer-to-computer IP telephony." The FCC concluded that such service did not appear to be a telecommunications service:

In the case of "computer-to-computer" IP telephony, individuals use software and hardware at their premises to place calls between two computers connected to the Internet. The IP telephony software is an application that the subscriber runs, using Internet access provided by its Internet service provider. The Internet service providers over whose networks the information passes may not even be aware that particular customers are using IP telephony

²⁴ Commission regulations define this point as the point of demarcation and/or interconnection between the communications facilities of a provider of wireline telecommunications, and terminal equipment, protective apparatus or wiring at a subscriber's premises. 47 C.F.R. § 68.3. For purposes of the FCC's access charge rules, a call "terminates" at the demarcation point. 47 C.F.R. § 69.2(cc).

software, because IP packets carrying voice communications are indistinguishable from other types of packets. ... [T]he Internet service provider does not appear to be “provid[ing]” telecommunications to its subscribers.²⁵

The Commission also discussed what it termed “phone-to-phone IP telephony:”

In using the term “phone-to-phone” IP telephony, we tentatively intend to refer to services in which the provider meets the following conditions: (1) it holds itself out as providing voice telephony or facsimile transmission service; (2) it does not require the customer to use CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network; (3) it allows the customer to call telephone numbers assigned in accordance with the North American Numbering Plan, and associated international agreements; and (4) it transmits customer information without net change in form or content.²⁶

The Commission concluded that there is no net change in form or content in this type of service from the end user’s standpoint, and that the service “does not offer a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information.”²⁷ On these bases, the FCC found that “the record currently before us suggests that this type of IP telephony lacks the characteristics that would render them ‘information services’ within the meaning of the statute, and instead bear the characteristics of ‘telecommunications services.’”²⁸

As stated *supra*, the Joint Commenting Parties’ provision of VoIP services does not fit the FCC’s definition of phone-to-phone IP telephony. Most significantly, the Joint Commenting Parties’ VoIP services require the use of specialized equipment adapted for connection to

²⁵ *Report to Congress* at ¶ 87.

²⁶ *Id.* at ¶ 88.

²⁷ *Id.* at ¶ 89.

²⁸ *Id.*

broadband Internet or managed network connections, and as such they are more appropriately characterized as either computer-to-computer, or computer-to-phone IP telephony. The Joint Commenting Parties' services also fail the fourth prong of the "phone-to-phone" definition, because they involve a net change in form (although not content) in the customer's transmissions. The Joint Commenting Parties' service may also be deemed to be computer-to-computer IP telephony when it is used to call another VoIP customer, never touching the PSTN. In this scenario, the VoIP customer is using "CPE different from that CPE necessary to place an ordinary touch-tone call (or facsimile transmission) over the public switched telephone network."²⁹ Accordingly, the Joint Commenting Parties' (and other similar providers) provision of VoIP service should be classified as either computer-to-computer IP telephony, or computer-to-phone IP telephony according to the FCC's definitions.

C. *Most VoIP and Other IP-Enabled Services are Information Services, Functionally Equivalent to Pulver.com's Free World Dialup Service*

The Commission recently concluded that Pulver.com's ("Pulver's") "Free-World Dialup" ("FWD") service fits the description of an information service. The Commission also recently concluded that AT&T's VoIP service is a telecommunications service. Although AT&T's service was deemed a telecommunications service, the Commission should recognize that most other VoIP applications, including those offered by the Joint Commenting Parties, are similar to Pulver's FWD, and as such, should be afforded similar regulatory treatment.

On February 12, 2004, the FCC granted Pulver's Petition for Declaratory Ruling that its FWD service is not telecommunications or a telecommunications service, but rather an

²⁹ *Id.* at ¶ 88.

information service, and therefore preempted state regulation of Pulver's VoIP service.³⁰ In its *Pulver Order*, the Commission stated:

[w]hile our traditional end-to-end approach to determining a communication's jurisdiction has relevance for a circuit-switched network, it has little or none with regard to FWD. Indeed, in the case of FWD the concept of "end points" has little relevance. What Pulver provides is information on its server located on the Internet. If an FWD member uses that information to set up communications, such as voice, between itself and other members, that communication—the only conceivable "end points" involved here—is transmitted by that member's ISP over the Internet. That does not, however, impute those "end points" to FWD, which remains a server on the Internet. Furthermore, even if the members' locations were somehow relevant to their use of FWD, FWD's portable nature without fixed geographic origination or termination points means that no one but the members themselves know where the end points are.³¹

The Joint Commenting Parties acknowledge that there may be differences between FWD and some other IP-enabled services that intersect the PSTN. However, the end-to-end analysis used by the FCC in the *Pulver Order* would similarly apply to other VoIP services that originate or terminate on the Internet or privately managed networks. The IP portion of a communication using both IP and the PSTN translates the relevant PSTN telephone number into an IP address. There is no means to identify the location of the IP address as the communication protocols utilized to transmit data over the Internet do not contain such information. Even if the IP address is mapped to a certain device, in many cases the device is portable to any other Internet broadband-enabled port, so the physical location is ultimately unknown. End users of VoIP and other IP-enabled services can change the destination of the IP address to another device or

³⁰ See *Petition for Declaratory Ruling that Pulver.com's Free World Dialup is Neither Telecommunications Nor a Telecommunications Service*, Memorandum Opinion and Order ¶ 20, FCC-04-27 (rel. Feb. 19, 2004) ("*Pulver Order*").

³¹ See *Pulver Order* at ¶ 21.

another location without the knowledge of the service provider. Thus, even for IP-PSTN communications, the IP end point is unknown and irrelevant.

D. *The Joint Commenting Parties' VoIP Services are Fundamentally Dissimilar to AT&T's Phone-to-Phone "VoIP Service"*

On April 21, 2004, the Commission denied AT&T's Petition for a Declaratory Ruling that its phone-to-phone Internet protocol telephony service was exempt from access charges. The Commission found that AT&T's specific service offering is a "telecommunications service," because AT&T's system "merely uses the Internet as transmission medium without harnessing the Internet's broader capabilities."³² As such, the Commission's ruling on the AT&T Petition specifically applies to an interexchange service that:

- (1) uses ordinary customer premises equipment ("CPE") with no enhanced functionality;³³
- (2) originates and terminates on the public switched telephone network;³⁴ and
- (3) undergoes no net protocol conversion and provides no enhanced functionality to end users due to the provider's use of IP technology.³⁵

Moreover, unlike the customers of the Joint Commenting Parties, AT&T customers do not order a different service, pay different rates, or place or receive calls any differently than they do through AT&T's traditional circuit-switched long distance service, and AT&T, not the

³² *Petition for Declaratory Ruling that AT&T's Phone-to Phone IP Telephony Services are Exempt from Access Charges*, WC Docket No. 02-361, Order ¶ 17, FCC 04-97 (rel. Apr. 21, 2004) ("*AT&T Order*").

³³ Unlike AT&T's services, the VoIP services provided by the Commenting Parties specifically require the use of specialized equipment that converts between analog signals and IP data packets.

³⁴ Unlike AT&T's services, the VoIP services provided by the Commenting Parties either originates or terminates on a data network as opposed to the PSTN. The PSTN is only used on the far end of the VoIP communication, assuming that end-user is not a VoIP customer as well.

³⁵ Unlike AT&T's services, the VoIP services provided by the Commenting Parties undergo a net protocol conversion, providing enhanced functionality to the end users of the VoIP service.

customer, makes the decision to use the Internet to route calls. As noted above, the VoIP services provided by the Joint Commenting Parties utilize the Internet and/or privately managed networks in a much different manner than that provided by AT&T. Unlike the service provided by AT&T, the customers of the Joint Commenting Parties choose to place calls over the Internet or over a privately managed network. Moreover, unlike AT&T's service, the Joint Commenting Parties' services undergo a net protocol conversion that fundamentally changes the nature of the communication.

IV. Commission Regulation Should be Narrowly Aimed at the Physical, Facility Layer

The Joint Commenting Parties acknowledge that Commission regulation of certain aspects of data transmission IP-enabled services may become necessary to meet certain public policy goals. Should the Commission determine that such regulation is necessary, it should ensure that such regulations be enacted on a "layered approach." These public policy and other regulations should be aimed at the *physical facilities* or "facilities layer" that underlie the telecommunications network infrastructure. The facilities layer is the point at which market power can be exercised and negatively impact the application layer, and as such should be the appropriate target of FCC regulation.

As discussed at length by MCI, the Communications Act is flexible enough to allow the Commission to implement a layers approach to regulation.³⁶ The FCC should assess market power for each individual layer, and develop regulations at that layer necessary to prevent such

³⁶ See generally MCI, *Written Ex Parte Presentation: IP-Enabled Services*, WC Docket No. 04-36; *Appropriate Framework for Broadband Access to the Internet over Wireline Facilities*, CC Docket No. 02-33; *Review of Regulatory Requirements for Incumbent LEC Broadband Telecommunications Services*, CC Docket No. 01-337; *Developing a Unified Intercarrier Compensation Regime*, CC Docket No. 01-92; *Federal-State Joint Board on Universal Service*, CC Docket No. 96-45, Docket No. 04-36 (FCC Mar. 29, 2004). See e.g., *A Horizontal Leap Forward, Formulating a New Public Policy Framework Based On The Network Layers Model*, Richard S. Whitt, Senior Director of Global Policy and Planning, MCI (Mar. 2004).

market power abuse.³⁷ Service providers and their individual applications are at the mercy of the facilities over which those services are provided.

V. VoIP is a Nascent Service and Should Not be Subject to Traditional Common Carrier Regulation

According to the Commission's Triennial Review Order ("TRO")³⁸, and other reports, there were approximately 182 million wireline access lines in the United States as of June 30, 2003³⁹ and approximately 129 million wireless users as of mid-2002.⁴⁰ These numbers represent the vast majority of telephony service in the United States.

On the other hand, it is commonly estimated that there are only 200,000 to 300,000 "active"⁴¹ VoIP subscribers in the United States.⁴² According to an analyst report by In-Stat/MDR, this number will grow to approximately 400,000 by the end of 2004, and will grow to about 7 to 8 million users by 2007. Clearly, as compared to traditional wireline and wireless services, VoIP is in its infancy. Even if VoIP usage reaches 7 to 8 million users in three to four

³⁷ See *id.* at 7.

³⁸ See *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Further Notice of Proposed Rulemaking, FCC 03-36 (Aug. 21, 2003).

³⁹ According to the FCC, , there were 182.8 million wireline access lines in the United States as of June 30, 2003. See Industry Analysis and Technology Division, Wireline Competition Bureau, *Local Telephone Competition: Status as of June 30, 2003* (rel. Dec. 22, 2003), available at <http://www.fcc.gov/wcb/iatd/comp.html> (visited May 26, 2004).

⁴⁰ See *In the Matter of Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers*, CC Docket Nos. 01-338, 96-98, 98-147, Report and Order and Further Notice of Proposed Rulemaking, FCC 03-36 at n.164 (Aug. 21, 2003).

⁴¹ As opposed to those customers who unknowingly utilize "VoIP" service through phone-to-phone transmission services such as that provided by AT&T.

⁴² See Time to Redial: VoIP (Voice Over Internet Protocol) Makes a Comeback, Knowledge@Wharton, available at <http://www.knowledge.upen.edu> (Jan. 28, 2004).

years, it cannot seriously be argued that this service is going to significantly affect the market of traditional telephony in the near-term.

As VoIP is an inherently competitive information service unlikely to significantly affect the traditional telephony market, it is imperative that VoIP be allowed to grow and develop unhindered by unnecessary common carrier regulation. Generally, there are no geographical limitations placed on a customer regarding who they choose as their VoIP provider. It is a nationwide service, with all providers competing on a nationwide basis and attempting to attract and retain customers. Already, prices have been driven down, and innovative offerings have come to market on what seems to be a monthly basis. Subjecting VoIP and other similar IP-enabled services to a myriad of obligations normally reserved for “telecommunications services,” such as traditional tariffing obligations, would be inappropriate not only as a legal matter (as noted *supra*), but as a matter of public policy as well. Tariffs, for example, have traditionally been required in order to force transparency of rates, terms and conditions of telecommunication services. VoIP service, on the other hand, requires a broadband connection which inherently offers its customers greater access to this information. In fact, most VoIP providers offer simpler service plans such as unlimited calling across the United States (and other countries in some cases) for a flat rate, or a simple charge per call or per minute of service. Other enhanced services are included in monthly VoIP service packages such as those offered by Joint Commenting Parties noted *supra*.

Under these conditions, it makes no sense to subject a VoIP application provider to economic regulation that is more appropriate for the facility layer. Specific information such as billing practices, access to emergency services, and rates for enhanced services are readily available to end users, all of whom have broadband Internet access. Market competition

necessitates such transparency. Requiring compliance with traditional common carrier regulation would significantly burden this nascent industry and provide no additional benefits to consumers or regulators. In VoIP's competitive marketplace, customers have ample opportunity to leave poor and expensive service for quality inexpensive service.

VI. The VoIP Industry Should be Given the Opportunity to Address Social Goals

A. Access to Emergency Services

Clearly there are several public policy goals that should apply to all providers of voice services, regardless of whether that service is categorized as a "telecommunications service" or an "information service." The VoIP industry is currently taking steps to address these concerns, and should be allowed to continue to do so.

Although VoIP is still a service in its infancy with less than 1% of the users in the traditional telephony market, the VoIP industry is already taking the extraordinary step of ensuring that emergency service features are commonly available through VoIP service offerings. For example, the industry is already working to develop standards that will allow for the provision of a service similar to wireline E911. The National Emergency Number Association ("NENA") is in the process of holding forums devoted to VoIP and 911 emergency services. Similarly, the Alliance for Telecommunications Industry Solutions has held several forums and workshops devoted to VoIP 911 standards.⁴³

The competitive communications marketplace is driving companies to offer these services. ICG Communications is currently providing access to emergency services through VoIP in order to meet consumer demand for such service. ICG's service is designed to recognize a 911 call from a VoIP customer. The company automatically converts that call into

⁴³ See Press Release, ATIS, ATIS Webinar: VoIP and E911 Critical Implementation Issues (Feb. 11, 2004) available at: <http://www.atis.org/PRESS/pressreleases2004/021104.htm>.

an analog signal (i.e., time division multiplex or “TDM”), and delivers it to the appropriate public safety answering point (“PSAP”). Thus, ICG’s VoIP service does not require the PSAP to have the ability to answer VoIP calls, as the company provides that conversion internally.⁴⁴

Additionally, the Commission has allowed the wireless industry flexibility to develop and install appropriate E911 services. In fact, wireless services are still phasing in E911 services today. VoIP providers should be allowed similar flexibility to adopt industry standards concerning emergency services, and time to implement those standards and technology. The competitive VoIP market is already beginning to solve this problem; the VoIP industry should be afforded the time and flexibility to address this issue internally.

B. Contributions to the Universal Service Fund

The Joint Commenting Parties believe that the Universal Service Fund (“USF”) program requires reform. Along with many VoIP providers, the Joint Commenting Parties understand the importance of this program. In fact, many VoIP service providers already indirectly contribute to the USF. Others are willing to do so should the Commission develop a fair and efficient system to do so. The Commission need not classify VoIP as a telecommunications service to mandate USF contributions. Should the Commission conclude that VoIP is an inherently interstate service, it can assert its exclusive federal jurisdiction to require VoIP providers to contribute to USF. Moreover, the Commission should allow the VoIP industry the opportunity to develop the standards and systems by which VoIP providers contribute to the USF. This flexibility would probably lead to increased support for USF funding among the VoIP industry, and lead to a fair and effective system that the VoIP community can support. Moreover, the

⁴⁴ As a competitive local exchange carrier (“CLEC”), ICG Communications has the ability to route 911 traffic to the appropriate PSAP.

Commission should recognize that universal access to broadband is essential to the country's continued leadership.

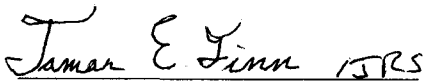
C. *Access Charges*

Moreover, the Joint Commenting Parties also believe that the current access charge system requires reform. Should the FCC determine that access charges should apply to VoIP, the Commission should reform the system to reflect the new realities of the telecommunications market in the United States. Historically, the access charge system was developed in a telecommunications market driven by a single interexchange service provider utilizing the facilities of local exchange carriers on the origination and termination ends of an interexchange call. Clearly, that simplistic model does not reflect current conditions. Should it become necessary, the VoIP industry should have the opportunity to develop a proposed contribution methodology reflecting this reality.

VII. Conclusion

A new future in telecommunications has arrived. By ensuring that IP-enabled services are afforded regulatory treatment specifically designed for those services, and without unnecessary controls required for the legacy infrastructure, the FCC has an opportunity to foster a new generation of competitive communication services. The Commission should declare that VoIP is an inherently interstate information service, subject to its exclusive jurisdiction. The Commission should take a light regulatory approach to VoIP as this new competitive market spurs innovation, enhances service offerings, pushes forward broadband deployment, increases service quality, and decreases prices. The Commission should declare that VoIP is not subject to traditional common carrier regulation, and allow the VoIP industry the flexibility to meet important social goals set forth by the Commission.

Respectfully Submitted,

Handwritten signature of Tamar E. Finn in cursive script.

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